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PROVISIONS AND PROCEDURES FOR THE RAPID LEARNER IN SELECTED TEXAS JUNIOR HIGH SCHOOLS.

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The study attempted to survey the administrative, guidance, and curriculum practices employed by selected junior high schools in the state of Texas, and to compile the findings of the research in such a manner that other teachers confronted with the rapid learner in the junior high school might have a tangible source of provisions and techniques used by successful teachers. The 40 final participants completed questionnaires adapted to the junior high school level from a study by the U. S. Office of Education. The questionnaire consisted of three categories: administrative provisions; discovering the rapid learners; and instructional provisions and procedures in English, social studies, mathematics, science, home economics, and industrial arts. Results prompted recommendations that a plan for locating the rapid learner be provided and that organized programs of learning experiences for the special abilities of rapid learners be established. Nine tables, lists, and explanations of data are provided. A bibliography cites 19 items. (RM)

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for the  
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TEXAS JUNIOR HIGH SCHOOLS

BY  
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Del Rio, Texas

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RESEARCH BULLETIN NUMBER THIRTY-FOUR

TEXAS STUDY OF SECONDARY EDUCATION  
AUSTIN, TEXAS : MAY, 1962

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## FOREWORD

Inasmuch as the early discovery and the development of talent are closely related to national progress, any practices directed toward those ends are of immediate interest to secondary school principals. In view of this fact and in response to the request from members of the Texas Association of Secondary School Principals, the provisions for talented pupils in a number of junior high schools were assembled and are presented in the report that follows.

The study was made possible by the interest of Mr. Lewis H. Herring a year ago as a member of the seminar in secondary education at The University of Texas. Gratitude is expressed to Mr. Herring and to the teachers and principals who made data available from their schools. The many suggestions carried in the report should help improve the quality of learning of talented youth.

Perhaps a word of caution would not be out of place. Some talented youth are already over stimulated. To increase the pressure under which they now operate would lead to impaired mental health and destroy the talent they possess. There has been a general tendency during the last ten years to greatly increase the school work expected of all youth. Many a dad who did not exert himself academically in high school insists that his son or daughter concentrate upon the "tough" subjects. Their doing so carries a kind of prestige to the home. This is all to the good provided it does not lead to clobbering the bright youngster with unreasonable demands, provided it does not do him and therefore society more harm than good. A lesson might be learned on this point from our chief antagonist whose schools in 1958 provided work experience to reduce the over-emphasis on academics that had gradually developed in their program. Let's encourage each pupil to work to the optimal degree for him and to *conserve* as well as to develop his talents; but let's not become so scared over the world crisis as to destroy the best resource we have for national strength, our talented youth, by irrational demands. To avoid such a result, the guidance and counseling program for each pupil must govern the curricular program.

J. G. UMSTATTD, *Co-ordinator*  
The Texas Study of Secondary Education

The University of Texas  
February 15, 1962

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## SIGNIFICANCE OF THE STUDY

### INTRODUCTION

The vast interest in the able-learner in recent years is probably a direct result of concern of thoughtful parents, public leaders, and educators in response to the attack referred to in the statement, "The U.S. public schools are under the stormiest attack in their history."<sup>1</sup>

Much of this attack is a result of the increased technological advances of the 1950's. The tempo of social change has accelerated since World War II. The scholastic population has steadily and rapidly increased, with over four million additional children being added to the American population each year.<sup>2</sup> As the additional children crowd the already bulging classrooms, the teacher shortage increases. With a rapidly expanding society in a vast new era of technological advances, an urgency has been created by the continuing threat of Soviet power and the possibility of World War III. Many reports have reached the United States which indicate (1) that Russian educational institutions are outproducing the U.S. in trained engineers and scientists and (2) that an "all-out" effort is being conducted by Russia to identify and train its rapid-learners.<sup>3</sup>

It has been demonstrated that there are enough young people with high learning potential to meet this country's technological and leadership needs, provided these persons are discovered and given the necessary training early enough in life.<sup>4</sup> Although many criticisms have been raised about the quality of the educational system which permits shortages in leadership to exist, true evaluation of our American educational system will reveal a higher production of trained persons than the systems of any other country of the past or present.<sup>5</sup> Educators, nevertheless, are plagued by pressure groups to do something about the shortage.<sup>6</sup> To many educators, the current pressures which are demanding that the public school revamp its program offer an opportunity to work toward educational purposes which have long been valid but on which accomplishment was next to impossible because of the lack of a crisis.<sup>7</sup>

<sup>1</sup> "The Truth About Our Public Schools," *Changing Times*, June, 1954, p. 7.

<sup>2</sup> G. Z. F. Bereday (ed.), *Public Education in America* (New York: Harper & Bros., 1958), p. 129.

<sup>3</sup> A. J. Tannenbaum, "History of Interest in the Gifted", *Education for the Gifted*, Fifty-Seventh Yearbook of the National Society for the Study of Education, Part II, (Chicago, Ill.: University of Chicago Press, 1958), p. 35.

<sup>4</sup> R. J. Havighurst and others, "The Importance of Education for the Gifted," in *ibid.*, p. 4.

<sup>5</sup> Bereday, *op. cit.*, p. 152.

<sup>6</sup> *Ibid.*, p. 145.

<sup>7</sup> *Ibid.*, p. 121.



Many articles relating to provisions for the talented pupil have made their appearance in recent years leading one to believe that talent is something new. An uncertainty of exactly how to develop talent is only one part of great unsolved problems in American education today. Continued neglect of talent is a luxury that the United States can no longer permit if our democratic way of life is to continue.

#### STATEMENT OF THE PROBLEM

This study has attempted to (1) survey the administrative, guidance, and curriculum practices employed by selected junior high schools in the state of Texas, and (2) compile the findings of the research in such a manner that other teachers confronted with the rapid-learner in the junior high school might have a tangible source of provisions and techniques used by successful teachers of rapid-learners in the junior high school.

#### PROCEDURES FOLLOWED IN THIS STUDY

In October, 1959, and January, 1960, two hundred members of the Texas Association of Secondary School Principals were mailed a letter of intent to investigate the administrative, guidance, and curriculum provisions for the rapid-learner in the junior high schools of Texas. Those principals who were interested were asked to return an appended questionnaire. Eighty junior high school principals volunteered to participate. They were mailed the portion of the study in which they wished to participate. Questionnaires submitted were detailed adaptations to the junior high school level of a study made by the U.S. Office of Education in 1954. Forty schools were final participants in the study. It is from this group of schools that the research in the curriculum provisions in English, Social Studies, Mathematics, Science, Home Economics, and Industrial Arts has been made.

## RESEARCH FINDINGS

The series of questionnaires compiled for use in the study consisted of three categories:

- Part I. Administrative Provisions
- Part II. Discovering the rapid-learners
- Part III. Instructional provisions and procedures
  - A. In English
  - B. In Social Studies
  - C. In Mathematics
  - D. In Science
  - E. In Home Economics
  - F. In Industrial Arts

The schools which indicated a desire to participate in the study were mailed Part I and Part II and the desired portions of Part III early in February, 1960, *i.e.*, eighty schools received all of Part I and Part II and portions of Part III. Those schools providing the broadest program for gifted children consequently received all of Part III (A through F) or as many questionnaires as special subject programs were offered. All portions of Part III encouraged additional teacher comment, so that a complete picture could be drawn of the work offered.

For the purpose of this report, 50 percent of the schools which returned the final questionnaires will be studied. A total of 25,759 junior high school scholastics are represented by the schools participating in the study. Based upon 1958-1959 scholastics enrolled in Texas public schools, this study represents 1.3 percent of that school year's enrollment. The exact percentage of Texas junior high school enrollment cannot be determined because records are not maintained at the state level regarding junior high school enrollment since various divisions of school curriculum exist in the state at this time. This can perhaps be seen from Table I on the following page which was made from responses to this study.

This table reveals that classification of the junior high school is not uniform in the state of Texas, but the predominant school organization that includes a junior high school is probably 6-3-3.

Approximately 20 percent of all children who test at 100 IQ and above are termed "superior"; this study is directed at that segment of the school population.

### ADMINISTRATIVE PROVISIONS

Thirty-eight of the schools completed the administrative portion, Part A, Provisions for Rapid-Learners. Thirty-two of the schools responded to Part B,

TABLE I  
*Grades Taught and Enrollment Range at Schools Studied*

Total Schools in Study	40	
Total Scholastics	25,759	
Grades taught	Number of schools	Enrollment range
6, 7, 8	3	290-1882
6, 7, 8, 9	2	540-1054
7, 8	5	465- 850
7, 8, 9	30	200-2250

Provisions for Rapid-Learners (Ninth Grade). For each of the seventeen provisions, each principal was asked to check "Yes" or "No" if the provision was or was not used in his school. A simple tabulation of "Yes" responses was made. The categories were then ranked according to the greatest number of "Yes" responses. The same procedure was used in ranking Part B of the questionnaire.

This study clearly indicates from section A of Table II that teachers are furnished guidance information pertinent to students. Whether teachers use this information remains undetermined, although 92 percent of the schools in the study provide it. More schools use homogeneous grouping in English, mathematics, social studies, and science than in any other area of the curriculum.

From section B of Table II it is noted that 93 percent of the junior high schools which have ninth grades provide a college preparatory program, while only 18 percent have classes sectioned where pupils do two years work in one year, or three years work in two years. Eighty-two percent of the schools studied do not provide supervised work experience or allow students to carry above normal class load for graduation credit. Thirty-six percent of schools reported that they could not always assign teachers on the basis of previous training and experience with rapid-learners. A constant attempt is being made by administrators to make assignments of teachers on the basis of ability to work with rapid-learning students.

Special provisions as invited by letter from the various principals participating in the study indicate the following types of programs for the rapid-learners in their schools.

One such letter comes from a rapidly expanding suburb of a large North Texas city. In part, it states:

. . . We have, this year, set up two ninth grade English classes, made up of students with upper 90 grades. Also, we have set up one algebra class, 9th, made up of students who scored high on the algebra prognosis test and whose grades were high in 8th arithmetic.



**TABLE II**  
*Administrative Provisions for Rapid-Learners*

Rank no.	Provision	Per cent using
<i>Part A, Provisions for Rapid-Learners</i>		
1.	Teachers furnished guidance information pertinent to students.....	92.5
2.	Regular classes furnished advanced study aids and additional learning materials .....	90.0
3.	Ability classes, students grouped according to I.Q., reading ability, previous grades, etc. ....	85.0
4.	Teachers assigned on basis of traits and interests suitable for work .....	82.5
5.	Space and equipment allow flexible grouping in classes and activities....	67.5
6.	Individualized instruction outside of the regular class .....	55.0
7.	Summer sessions provided .....	40.0
8.	Credit given for demonstrated achievement regardless of time spent in class .....	22.5
9.	Transfer to special school encouraged .....	02.5
<i>Part B, Provisions for Rapid-Learners</i> (In Schools Providing Ninth Grade)		
1.	College preparatory curriculum .....	93.0
2.	Elective classes offered in specialized or advanced subjects .....	82.0
3.	Teachers assigned on basis of training and experience with rapid-learners .....	64.0
4.	Flexible graduation requirements as to credits .....	58.0
5.	Remedial sections for able students whose performance is below capacity	45.0
6.	Students permitted to carry above-normal class load for graduation credit .....	39.0
7.	Supervised work experience .....	18.0
8.	Pupils sectioned in classes which do 2 years' work in 1; or 3 years' work in 2, etc. ....	18.0

The instructors of these classes are asked to include in their work the minimum requirements plus additional work which is intended as a challenge to the accelerated group. Advanced units are prepared and used with each period of work. Many interesting exercises are planned for literature.<sup>1</sup>

A Rio Grande Valley junior high school principal responded in part:

... all of our classes are grouped for instruction. All of the upper groups, (10-25 percent) receive an enriched program in all areas. Achievement test scores indicate that these students receive very superior training in all areas during their tenure in junior high.

<sup>1</sup> L. H. Stollenwerck, Principal, Crockett Junior High School, Irving Public Schools, Irving, Texas, November 10, 1959 (letter).

... the top group (roughly 5 percent) is accelerated in English and math in the seventh grade, covering seventh and eighth grade work in one year. This enables these students to complete 10th grade math and 10th grade English while still in junior high.

... these accelerated students will complete the regular offerings in English and math during their eleventh year, making advanced studies at the college level in these areas possible during their twelfth year.<sup>2</sup>

One south central Texas city school reports the following:

At the present time we age group our students according to their ability to read. Each year we administer a general achievement test and group the students on the basis of their achievement in reading. We find that, with few exceptions, this grouping technique also places the student in a group that has about the same achievement level in other subjects.

Using this grouping technique, teachers feel that they are better able to teach on the level of the group. Each group can be enriched, or the teaching can be intensified, depending on the achievement level and ability of the group.

Teachers have been charged with the responsibility of teaching each group and finding and using the materials and devices they need.<sup>3</sup>

One response from a rather small agricultural community in south central Texas states in part:

*Free Time Program.* Students who qualify as gifted are offered an opportunity to select a major work project such as rock collecting and identification, historical research, etc. (We define gifted as the upper 1 to 2 percent.) A teacher is then assigned to guide the student in his or her work and to evaluate progress. In order that the student may have sufficient time to develop the project, he or she is given the opportunity of missing each class once a week provided the work is done on the project under the supervision of the teacher. Students are held responsible for any and all work missed in regular classes.

*Advanced Courses Program.* Eighth grade students who qualify as gifted are offered the opportunity to take a freshman course of their choice in addition to the regular eighth grade curriculum. The freshman course is taken during the regular study hall period.

*Program for the Academically Able.* (Upper 25 percent.) Students who qualify as academically able are grouped together for the entire day which enables teachers to cover more subject matter and give more enrichment. Students in these accelerated groups earn higher grades, of course, than those in average and below average groups.<sup>4</sup>

<sup>2</sup> Harold R. Dooley, Principal, Gay Junior High School, Harlingen, Texas, November 9, 1959 (letter).

<sup>3</sup> S. A. McGinty, Principal, Harlandale Junior High School, San Antonio, Texas (letter).

<sup>4</sup> Bill Sims, Principal, Kenedy Junior High School, Kenedy, Texas (letter).

In an industrialized southeast Texas community, the following in part describes the program for their academically able students:

A selected group of incoming 7th graders (highest I.Q. and general achievements) were placed in a special math class under a selected teacher and given both 7th and 8th grade math in one term. Those completing the courses last year were highly successful and elected to take first year algebra . . . in the 8th grade. . . .

A selected group of 8th grade students (highest I.Q. and reading comprehension scores) were placed in a class under a capable teacher and taking 9th grade science. The group completing the course . . . elected to take biology in the 9th grade. . . . They are doing considerably above average work scattered in various 10th grade biology classes in high school.<sup>5</sup>

From a mimeographed brochure of the Aldine Junior High School, the following is of interest:

. . . we began by placing students into sections according to their demonstrated classroom ability. The advanced classes are composed of students who are very fast learners, as evidenced by past test scores and academic grades. Their subject material is more difficult and more intense; we provided special enrichment courses, such as French and Spanish for the 8th grade, and research methods for the 7th grade. Only excellence in all work from these gifted students is acceptable.

From the Highland Park Public Schools (Dallas, Texas) handbook, *Ways of Working with Able Learners*, 1958, the following is taken:

Essential to the purposes of education in the Highland Park Schools is the goal of helping each student develop to his own potential. For the many bright and eager students, that potential is very high. The overall school policy is to encourage teacher initiative in work with individual students in a classroom situation without ability grouping.

. . . When departmentalized instruction begins in junior high school, the provision for more able learners becomes a matter of counseling, grouping for instruction within the classroom, and individual work with top ability students. Boys and girls with high interest in band, chorus, or orchestra may choose to continue this study each year in addition to academic subjects. . . . Through conferences and study of cumulative records, students of high ability are helped to select more difficult courses in the ninth grade.

. . . Throughout the program of school development of able learners runs the vital emphasis on work by individual teachers with individual students.

. . . Because . . . capacity is very high for many students, the work of dedicated and highly effective teachers is one of the greatest importance.

It is evident from a compilation of these letters, that for any school to make adequate provisions for the rapid-learner, both administrator and classroom teacher first must have means to identify the rapid-learner.

<sup>5</sup> Roy L. Howard, Principal, Carr Junior High School, Orange Independent School District, Orange, Texas (letter).

### GENERAL TECHNIQUES

Table III shows 20 general techniques used by schools in identifying the rapid-learner.

TABLE III  
*Procedures Used in Discovering Rapid-Learning Pupils*

Item	Information or Technique	Rank
1.	Standardized achievement tests .....	1
2.	Teachers' marks .....	2
3.	Teachers' estimates of school achievement .....	3
4.	Information on reading habits .....	4
5.	Guidance counselor's appraisal of pupil's interest, aptitudes, and abilities .....	5
6.	Information on personality adjustment .....	6
7.	Teachers' estimates of aptitudes .....	7
8.	Anecdotal reports and records .....	8
9.	Group intelligence tests .....	9.3
10.	Information on home environment .....	9.3
11.	Information on physical health .....	9.3
12.	Teachers' estimates of intelligence .....	11.5
13.	Information on social maturity .....	11.5
14.	Standardized aptitude tests in specific fields .....	13
15.	Home room adviser's appraisal of pupil's interests, aptitudes, and abilities .....	14
16.	Individual intelligence tests .....	15
17.	Information on vocational plans .....	16
18.	Information on hobbies .....	17
19.	Information on physical maturity .....	18
20.	Parental appraisal of pupil's interests, aptitudes, and abilities .....	19

Ninety percent of the schools in the study utilize more than half of these provisions and techniques in finding the rapid-learner. It seems significant to note that standardized achievement tests rank first among techniques used to isolate the rapid-learner. Teachers' marks, teachers' estimates of school achievement, and information on reading habits ranked second, third, and fourth, respectively. *None* of the schools in the study failed to use these four techniques or criteria in determining its rapid-learners. Thirty-eight and eight-tenths percent of the schools reporting *never* use parental appraisal of pupil's interests, aptitudes, and abilities in identifying the rapid-learner.

After a school isolates the rapid-learner, then it must provide the pupil with instruction commensurate with his abilities.

### INSTRUCTIONAL PROVISIONS

As was mentioned earlier, six questionnaires were used to determine provisions, techniques, and procedures used by teachers in the teaching of rapid-



learners. The teacher was asked to complete the questionnaire by checking either SOME, NONE, or MUCH following each practice listed on the questionnaire. The responses were tabulated. Those responses listed under NONE received a value of zero; the responses under SOME received a value of one; and the responses under MUCH received a value of two. The number of responses multiplied by their respective values was totaled and this total was divided by the total number of responses to arrive at a true mean. This procedure was used for the entire series of the questionnaire that required an answer of NONE, SOME, or MUCH. After the mean was determined, the various provisions, techniques, and procedures were ranked according to their weighted mean.

### *English*

Fifty-seven and one-half percent of the schools in this study report programs for the rapid-learner in English. In attempting to interpret the weighted means of the various provisions in English, one might study Table IV and isolate such practices as those dealing with the teaching of reading and literature and estimate the rank of his own program in relation to this study. It may be noted that the detailed studies of the classics ranked toward the low end of the mean. From persons teaching this phase of English, it is learned that usually the classics and memory work of the various lines of well-known poetry and drama are reserved for high school teaching.

Comic books and magazines of inferior quality are a problem today as they have been in the past. Teachers responding to item 4 in Table IV indicate through the weighted mean that solutions to this problem ranks fourth in the practices employed by teachers of rapid-learners.

All teachers of rapid-learners require mastery of certain minimum essentials in grammar and usage. This item ranked number one in the study. The portion of Table IV which deals with the communication skills are items numbered 1, 2, 6, 10, 12, 17, and 20.

At the end of the questionnaire Part III-A, Instructional Provisions and Procedures in English, appeared the statement: "If you have had unusual success in adapting your language-arts program to rapid-learners, would you please tell about your program on separate sheets of paper and append to the questionnaire?" In response to the last question, the following provisions have been selected:

With the cooperation of the local radio station, some of the students help conduct a daily radio program.

We select a one-act play to dramatize, and take interested students to speech and literary clinics and tournaments.

Formerly, this group staffed the school paper in addition to other learning experiences.



TABLE IV  
*Instructional Provisions and Procedures in English*

Item and rank	Techniques, provisions, and procedures	Mean
1.	Require mastery of certain minimum essentials in grammar and usage..	2.00
2.	Teach niceties of expression, such as distinctions between "shall" and "will", "between" and "among", "go slow" and "go slowly", "may" and "can", "lent" and "loaned", etc. ....	1.78
3.	Assign printed materials with difficulty approximating individual's reading age .....	1.75
4.	Help students to find good substitutes for inferior comic books and magazines .....	1.61
5.	Encourage work on individual projects related to student and class needs .....	1.59
6.	Teach principles of grammar and usage observed by educated leaders in public life who attract large reading and listening audiences .....	1.57
7.	Teach grammar, composition, and literature together in units organized around ideas, themes, or centers of interest .....	1.52
8.	Provide experiences as contributing members of small group .....	1.50
9.	Provide experiences in responsible group leadership .....	1.35
10.	Conduct drills to eliminate recurrent vulgarisms such as "I ain't", "can't hardly", "he don't", etc. ....	1.32
11.	Encourage extensive reading of good literature outside of class .....	1.31
12.	Provide extended experiences in evaluative listening .....	1.27
13.	Encourage participating in speech and writing contests .....	1.21
14.	Encourage students to evaluate own progress .....	1.09
15.	Allow students freedom in carrying out activities .....	1.09
16.	Emphasize reading of modern literature related to student interests and needs .....	1.09
17.	Teach through recordings, radio, and other audio aids .....	1.09
18.	Teach formal diagramming of sentences .....	1.05
19.	Provide extended experiences in selecting and evaluating television programs .....	1.04
20.	Teach symbolic interpretation of reading of pictures, sketches, cartoons, and other graphic material .....	1.03
21.	Encourage students to note differences in languages used by public speakers and writers .....	1.00
22.	Provide extended experiences in evaluating newspapers and magazines for purpose, content, and values .....	1.00
23.	Assist students in preparing talks and other oral presentations to be given outside of school .....	.96
24.	Require memorization of specified number of lines of poetry or drama .....	.95
25.	Teach through pictures, charts, and other graphics .....	.94
26.	Allow students to choose and plan learning activities .....	.86
27.	Provide extended experiences in selecting and evaluating movies.....	.73
28.	Conduct detailed, intensive study of classics, such as Shakespeare's plays .....	.73
29.	Use simplified and/or abridged editions of books like <i>A Tale of Two Cities</i> for students .....	.66
30.	Teach through trips to public library, museums, newspaper plants, and similar places .....	.43

Develop critical thinking and reading experiences through extra library reading and reporting.

We provide spelling and journalism clubs for those interested students.

Making maps to guide class study such as a map of Evangeline's journey.

Encouraging artistic students to provide illustrations for current work.

Having pupils responsible for providing periods devoted to audio-visual aids that fit in with the class work.

Specific guidance toward special interests or special aptitudes in vocational theme research.

Enriched reading lists for outside or leisure reading.

Extensive guided library research.

These are a few of the special provisions used by capable teachers who have been charged with the responsibility of training the rapid-learner in English but indicate the scope of activities in various enrichment programs.

### *Social Studies*

Forty-two and one-half percent of the schools responding to this study provide special procedures for the rapid-learner in social studies. Those practices most frequently used in the teaching of rapid-learners can be divided into three classes:

1. Individual research, including the use of standard library references.
2. Current events, guidance, in newspaper reading, radio and television listening.
3. Critical thinking and analysis of social problems.

The techniques or provisions used the least with rapid-learners are those items from 21 to 30 (Table V).

Perhaps the least used techniques could be grouped into one group of approximately six categories. Ten items have a mean score above 1.50, while only two items have a mean score of less than 1.00. Items 11 through item 22 show that more than one practice had the same weighted mean.

In response to the final portion of Part III-B, Instructional Provisions and Procedures in Social Studies, various teachers listed the following practices that had proven successful:

Have students manage campaigns of candidates for school offices.

Prepare lists of criteria to help develop critical listening to detect propaganda.

Utilize copies of new legislation as enrichment class material.

Use heirlooms and relate their story in the history of our nation's progress.

Cooperate with state agencies on historical research papers.

Maintain line graph on stock market issues and relate to current historical developments.

Responsibility in good leadership through aiding underachievers.

Encourage extensive reference reading in sets of texts of high school level to encourage students to arrive at various views of various authors.

Use of student initiative in preparation of projects, notebooks, animated maps, and illustrations.

TABLE V  
*Instructional Provisions and Procedures in Social Studies*

Item and rank	Techniques, provisions, and procedures	Mean
1.	Teach pupils to use the layman's reference books: the dictionary, encyclopedia, World Almanac .....	2.00
2.	Encourage pupils to use references in a large library .....	1.85
3.	Teach basic skills in reading and writing (including map reading) to build social studies vocabulary and concepts .....	1.85
4.	Assign individual research projects on selected topics .....	1.85
5.	Assign biographies of recognized literary merit of men and women who have made important contributions to civilization .....	1.67
6.	Encourage pupils to engage in conversation in school and at home on current events, politics, government, and news of school and neighborhood .....	1.66
7.	Use current events as an important part of class work .....	1.62
8.	Teach pupils how to read a newspaper (learning to distinguish between fact and opinion, recognizing the use of propaganda devices, etc.) .....	1.62
9.	Encourage pupils to select and plan to see and listen to radio, television programs, and movies of social significance .....	1.62
10.	Use critical thinking when the class is seeking a logical solution for a social problem .....	1.53
11.	Plan learning experiences in large units .....	1.46
12.	Encourage pupils to make individual studies of the history of areas in which they have special interests (art, music, medicine, etc.) .....	1.46
13.	Use the socialized recitation to develop major ideas .....	1.42
14.	Supervise the planning of culminating activities by class or organize major ideas of a unit .....	1.42
15.	Utilize resources of the local community for study .....	1.31
16.	Encourage pupils to read classics of historical importance .....	1.31
17.	Encourage pupils to set up personal goals and to engage in self-evaluation to see progress .....	1.31
18.	Have pupils make charts and graphs based on statistics .....	1.23
19.	Teach pupils how to register and vote. Give experiences in studying party platforms and personal views of candidates .....	1.23
20.	Lead the class in an evaluation of how well a job carried out by the whole class has been done and how group work can be improved....	1.23
21.	Evaluate the work of the class in terms of changes in behavior toward better citizenship .....	1.22
22.	Encourage participation in local adult movements .....	1.22
23.	Provide experiences for pupils to examine prejudices and attitudes that are provincial .....	1.17
24.	Use several textbooks for pupils of different ability rather than a single textbook .....	1.15
25.	Use group process in which all pupils use information to find solutions for social problems .....	1.08
26.	Encourage and advise pupils to organize and operate student governments and manage extra-class activities .....	1.07

27. Give pupils practice in reading all parts of news magazines. (Include medicine, music and art, science, as well as national and international news.) .....	1.07
28. Use pupil-teacher planning in studying social problems .....	1.00
29. Provide experiences to help pupils learn how to find and apply for jobs .....	.77
30. Arrange for preparation and presentation of radio and television programs .....	.54

Visit naturalization proceedings and report to class.

Enrichment of class work and group work in the area of social studies is apparently found without too much effort, but the teacher must be alert to the challenge of the rapid-learner if he is to make the maximum of resources available.

#### *Mathematics*

Sixty-five percent of the schools in the study report programs for the rapid-learner in mathematics.

The data obtained from the mathematics section of the questionnaire and compiled in Table VI indicate that attempts are being made to provide for individual differences. Some of these practices are very time consuming and may not be effective in teaching large classes. "Providing individual supervision and guidance during class" ranked highest in the practices used by teachers in this study. "Emphasis of the social uses of mathematics" and "assignment of the same homework to each student" ranked second and third respectively. (Table VI.)

The study indicates that all students of a given class are required to do approximately the same amount of and type of work for the same mark (item 4). Student self-evaluation is used more (item 5) than providing experience in group evaluation (item 23). As this study indicates, planned group work in providing for individual differences is not being used to a large extent by teachers of rapid-learners (item 26). A very small percentage of teachers answering this questionnaire use the mathematics club as an opportunity for special development of individual differences (item 29).

One central Texas junior high school reported that in its mathematics program for the rapid-learner accelerated classes were used in order for eighth graders to take algebra I in the eighth grade and plane geometry in the ninth grade.

Regular classroom curriculum started the program with increased numbers of stated problems ensuing as progress was made. Creative projects were made each six weeks by students in forms of posters, models, notebooks, solids in different materials, planes in different materials.



TABLE VI  
*Instructional Provisions and Procedures in Mathematics*

Item and rank	Techniques, provisions, and procedures	Mean
1.	Provide individual supervision and guidance during class .....	1.62
2.	Emphasize the social uses of mathematics .....	1.54
3.	Assign the same homework to each student .....	1.54
4.	Require all students in a given class to do approximately the same amount and type of work for the same mark .....	1.45
5.	Encourage student self-evaluation .....	1.42
6.	Encourage students to compete for awards given for superior scholarship .....	1.24
7.	Provide experiences in group work .....	1.23
8.	Give individual assistance to pupils after school hours .....	1.22
9.	Assign simple drill problems .....	1.22
10.	Give the students experiences in applying the principles of mathematical reasoning to social problems .....	1.21
11.	Display students' work on bulletin board .....	1.20
12.	Encourage able students to assist slower students .....	1.15
13.	Encourage students to make aids to instruction for the classroom .....	1.12
14.	Encourage study of the applications of mathematics to science .....	1.11
15.	Encourage solution of mathematical problems from field of students' interests .....	1.11
16.	Assist students in learning vocabulary and reading skills peculiar to mathematics .....	1.09
17.	Emphasize manual activities which illustrate mathematical principles..	1.08
18.	Encourage each student to work at his own rate, but require the student to confine his work to the same topic as the other students.....	1.08
19.	Encourage students to read simple stories about mathematics or famous mathematicians .....	1.04
20.	Encourage students to make scrapbooks and prepare graphic materials showing uses of mathematics .....	1.04
21.	Encourage students to make up problems by securing data from own reading or experiment .....	1.03
22.	Make individual assignments based on student's ability .....	1.00
23.	Give students experience in group evaluation .....	1.00
24.	Provide students with experiences in evaluating types of reasoning in newspaper and magazine articles .....	.96
25.	Encourage each student to work at his own rate and to complete as many topics as his ability will permit .....	.84
26.	Plan class activities with students .....	.81
27.	Provide a mathematics laboratory .....	.68
28.	Permit students to use class time for other subjects when mathematics assignment is completed .....	.42
29.	Provide students with experiences in a mathematics club .....	.31
30.	Provide field trips related to classwork .....	.15



The ninth grade class that had algebra in the eighth grade is taking plane geometry. They are following the same basic course of study that is used in the high school classes. . . . At the beginning, we worked together developing the basic concepts. This continued until the students knew their definitions, axioms, and postulates. Together, we developed the basic congruency theorems. Then after the class became secure in working out problems and theorems, the assignments became: read, work, and discover the new concepts for oneself. The students are encouraged to do their own individual work covering all the material necessary plus all supplementary that they had time to develop. They are encouraged to develop each problem and to use the shortest possible proof.<sup>6</sup>

Other practices which were reported as successful in dealing with the rapid-learner follows:

Accelerated and enriched special summer programs.

Active participation in the Interscholastic League Number Sense Contest.

Encourage participation in local science-math fairs.

Provide a mathematics library in the classroom for supplementary materials to be used when students complete assignments. Although these materials are used by all students, rapid-learners make much use of the facility.

Allow students to read and work from math books not related to the regular class work, but this must be before or after school hours.

Allow students to work from texts on the senior high level to a small extent when required work is finished. This project is on school time.

Research on special projects and oral reports for class presentation. A list of topics used successfully are:

1. History of Zero
2. History of Hindu-Arabic Systems
3. The Egyptian, Greek, and Roman Number Systems
4. History of Graphs
5. History of Irrational Numbers
6. Construct Geometric Solids
7. Construct Mathematical Posters
8. Property of Zero
9. Fundamental Laws
10. Sets and Set Notations

Enrichment materials are introduced through supplemental texts and other available sources; i.e., introduction to the number systems, the open sentence, sets, and inequalities. We are endeavoring to use as much material as possible from the Math Study Groups and any other related materials which are available.

Although some acceleration is being practiced within schools represented in the study, much emphasis is being placed upon individual and group enrichment activities.

<sup>6</sup> Isabella McCutcheon, 1004 Elm Street, Austin 3, Texas (letter), dated February 16, 1960.

## Science

This section of the study is a brief analysis of the techniques, provisions, and procedures used by the selected teachers in the teaching of science to rapid-learners. Of the schools participating in this study, only 45 percent report special programs in science for the rapid-learner.

Teachers place great emphasis on accurate reporting of science experiments by pupils, on reading, and other basic skills related to science, and on noting superstitions and biases which lead to unscientific thinking. Rapid-learners are urged to use scientific encyclopedias and references, to read scientific materials in newspapers, and prepare an evaluation of these readings.

Individual differences within a given class are varied. Motivating students to plan and pursue projects of the experimental type is common to most of the schools reporting. It appears that due to the various goals, interests, habits, skills among students, and large class size that some phases of a science program are not met adequately by assigning extra work. Since some junior high schools include grades seven, eight, and nine, a college preparatory program further complicates coping with individual differences.

It is encouraging to know that teachers are encouraging the use of library materials in the teaching of science to rapid-learners. Evaluation of current topics in science through the use of discussions of such scientific information as is presented by radio, television, movies, news magazines, and newspapers is receiving much consideration of the teachers of science to the rapid-learner.

From a review of Table VII, one can note that students are encouraged to assist with classroom demonstrations, yet few students become assistants for

TABLE VII  
*Instructional Provisions and Procedures in Science*

Item and rank	Techniques, provisions, and procedures	Mean
1.	Encourage students to use scientific encyclopedias and references in preparing science reports .....	1.94
2.	Insist that students report science experiments honestly and accurately .....	1.94
3.	Guide students to note superstitions and other biases that block fair consideration of scientific evidence .....	1.89
4.	Give students experiences in helping with science demonstrations.....	1.72
5.	Include student activities to stress basic skills such as reading tables, observing experiments, and spelling common science words .....	1.56
6.	Guide students to evaluate science notebook work against appropriate standards .....	1.56
7.	Help students understand scientific reasons for fire safety rules, sanitary standards, and/or first-aid practices .....	1.55
8.	Stimulate students to plan and carry on projects of the experimental research type .....	1.50
9.	Encourage students to read stories about famous scientists .....	1.50

10. Encourage students to collect clippings on the uses made of science in everyday life .....	1.50
11. Announce and conduct discussion of radio, television, and movie presentations of scientific events .....	1.47
12. Help students to participate in local science fairs and congresses .....	1.39
13. Help students to understand how tools such as the hammer, plane, drill, and screwdriver operate .....	1.33
14. Discuss with students the qualities that help a person hold a job in industry .....	1.28
15. Teach students to read and evaluate science materials from newspapers .....	1.28
16. Guide students to know the values of foreign languages for work in the sciences .....	1.11
17. Arrange for students to become assistants for class, laboratory, and/or science club work .....	1.06
18. Help students to analyze science information in statistical form.....	1.00
19. Use contracts and other methods that provide for learning activities at different levels .....	.88
20. Make use of puzzles and magic in teaching science .....	.84
21. Encourage students to study the science that underlies proficiency in such special interests as music, art, and history .....	.84
22. Help pupils participate in pupil-teacher planning to discover real problems for study in science .....	.83
23. Instruct students to repair simple home appliances, such as toasters, extension cords, and lamps .....	.78
24. Encourage students to engage in recreational reading of science fiction .....	.78
25. Encourage students to participate in adult activities such as providing information about a sewage disposal system .....	.78
26. Arrange for students to attend meetings of science teachers and scientists .....	.67
27. Help students to visit establishments where scientific products are made and/or used .....	.67
28. Arrange for doctors, nurses, engineers, and others to meet with science classes .....	.61
29. Arrange for students to try competitive science examinations and aptitude tests .....	.59
30. Expect students to make written reports on scientific happenings for the school paper .....	.28

class, laboratory, and/or science club work. Does this mean that only a few pupils receive leadership training? Perhaps the true answer lies in another direction. For the most part, science programs in the study are not laboratory courses. Few junior high schools have a functioning science club.

Little emphasis is placed upon the vocational aspects of science at the junior high school level if the study is correct. Few community scientists are used in teaching various concepts at this level of our science program.

One teacher appended the following statement as suggested activities to take care of the more advanced student in science:

The student should be guided to think more creatively, to find his area of interest and to try to stimulate and develop this area in the classroom by using these possible means:

1. Projects—testing powers of observation and discovery.
  - a. investigating his environment, (soils, plants, animals, the local weather, the sky—moon and planets, pests or destructive animals, chemicals, laboratories, etc.).
  - b. illustrating his area of interest not concerned with his immediate environment.
2. Scrapbooks—enrichment through reading and study: books, magazines, newspapers, and arranging information to acknowledge the results of the findings. (Locating scientific principles.)
3. Charts—making large ones to illustrate a subject in a very comprehensive way.
4. Building a display for the Science Fair.
  - a. individual or with a partner.
  - b. as a group they can list and discuss possibilities of subjects best suitable to its members.
5. Making Models—scaled for accurate and useful equipment for classroom or Science Fair possibilities.
6. Group Participation—research on a certain subject and comparing notes for accurate presentation, proof, challenging experiences.

Appended to the questionnaire relating to science were these additional suggestions for assisting the rapid-learner in science:

Students who are particularly intelligent are asked to help with setting up demonstrations, collecting and distributing equipment, science fair projects or any other situation which will give them experience in handling equipment so that they may grow familiar with the names, uses, and care of equipment. It is hoped that, through such experience, they are better adapted for more advanced science courses. Proper care and use is emphasized.

Provide summer classes in science for extra work.

Arrange for home visits to help with individual work or projects.

Provide use of simple laboratory equipment for home or leisure time scientific investigation.

Require the reading of one book per six weeks which is related to classroom work. Ninth grade (physical science) taught to a selected class of about 24 students who are eighth graders. The material is taught as in regular ninth grade classes and graded accordingly.

The group of students in the previous year's experiment were placed in tenth grade biology classes as ninth grade students. Though the marks for work were commendable, the program is being discontinued.

Look for the original approach to work, solution of problems.



Look for signs of leadership. Help student to conform and work with others; ask grade conscious students to act as tutor.  
Help students organize material, develop good study habits, learn to take notes. Supplement regular classwork, but never permit pupil to substitute an activity for work required in class.

### *Home Economics*

Of the forty schools participating in this study only 17½ percent reported programs for rapid-learners in the area of home economics. The reason is probably that fewer schools offer home economics at this grade level than at the high school level.

The teachers responding to this portion of the questionnaire seem to be thoroughly convinced that the student should be encouraged to do as much as his ability permits. The encouragement of pupils with creative ideas, interests, and talents to develop these traits under close classroom supervision also seemed to be well fixed in the minds of the teachers responding to the questionnaire.

Group planning of class activities is stressed, although individual help is provided outside of class. Most teachers use as learning experiences those personal and family problems that are real to the pupil.

A more detailed analysis on one's own techniques of teaching the rapid-learner can be made by studying those practices mentioned in Table VIII.

The three provisions least used by teachers of rapid-learners were items 28, 29, and 30. All of these techniques received a weighted mean of less than 1.00. It seems that pupils in the area of home economics should be well prepared to cope with the problems of adult life because of the scope of their previous training.

Several of the teachers of home economics classes of rapid-learners appended notes to their questionnaires indicating practices which were not mentioned in the questionnaire. They follow:

Encourage students to arrange bulletin boards.

The rapid-learners in my classes seem to be stimulated by classwork when they use their learning on a culminating activity such as any of the following:

1. Luncheon for faculty, school board, and superintendent.
2. Valentine Formal planned and presented by all eighth and ninth grade classes.
3. Flower show entries for competition.
4. Style show in which the student models.
5. Home projects to accomplish something needed.

They also seem to be interested in:

1. Being officers in F.H.A. organization.
2. Block planning of work for six-week periods.



TABLE VIII

*Instructional Provisions and Procedures in Home Economics*

Item and rank	Techniques, provisions, and procedures	Mean
1.	Closely supervise class activities .....	2.00
2.	Encourage pupils with creative ideas, interests and talents to develop them .....	2.00
3.	Encourage each pupil to do as much as his abilities permit .....	2.00
4.	Encourage pupils to carry on home projects .....	1.86
5.	Use as learning experiences personal and family problems that are real for pupils .....	1.86
6.	Emphasize ways of conserving time and energy in class activities.....	1.86
7.	Allow pupils to select projects of varying degrees of difficulty .....	1.86
8.	Provide additional individual help outside of class .....	1.71
9.	Provide opportunity to develop housekeeping skills through routine care of homemaking rooms .....	1.71
10.	Demonstrate manipulative processes and explain each one with illustrative material .....	1.71
11.	Encourage pupils to work at own rate of speed .....	1.71
12.	Encourage pupils to plan ways to interpret the homemaking program .....	1.57
13.	Use audio and visual aids .....	1.57
14.	Provide for pupil participation in choosing and planning learning experiences .....	1.57
15.	Encourage pupils to carry on experimental projects (with various homemaking activities) .....	1.57
16.	Emphasize manipulative activities .....	1.57
17.	Encourage selection of simple projects that can be completed within a short period of time .....	1.43
18.	Provide for pupil participation in setting goals and evaluating progress .....	1.42
19.	Provide simple and graphic reference materials .....	1.42
20.	Encourage independent study of student-selected topics .....	1.14
21.	Provide pupils opportunity to investigate jobs open to professionally trained home economists .....	1.14
22.	Provide pupils opportunity to learn about jobs which make use of homemaking skills .....	1.13
23.	Encourage extensive use of the school and homemaking department libraries .....	1.13
24.	Allow pupils to serve as assistant teachers .....	1.13
25.	Provide opportunity to interpret statistical and graphic data about homes and families .....	1.00
26.	Provide for much repetition .....	1.00
27.	Allow pupils to repeat projects or activities to develop skills .....	1.00
28.	Arrange field trips to homes, stores, factories, etc. ....	.71
29.	Encourage pupils to prepare articles about homemaking activities for school and local papers .....	.43
30.	Provide opportunity for pupils to assist in making plans for and keeping department accounts .....	.29

3. Planning F.H.A. calendar for the year ahead as school begins.
4. Attending state F.H.A. meetings.
5. Being given the scientific facts explaining why an activity is done a certain way—low heat for eggs, drying an iron skillet to prevent rust, leaving door open after lighting a gas stove, putting soda on a grease fire, etc.
6. A film which explained similarities between an industrial engineer's job and a homemaker's job with respect to saving time and energy.

Use students to arrange exhibit on family relationships, for which an original idea is needed to reach people of many interests. Every student in class sketches an idea; rapid-learners take the sketches and create a composite idea or make up a new idea.

Indicate professions related to homemaking field which require high degrees of proficiency in one phase—top dress designer, dieticians for problem patients, etc. Allow unlimited freedom of choice on home projects to those who have demonstrated unusual ability.

Encourage students to serve as officers or effective members in Future Homemakers of America to develop themselves and serve fellow students.

Perhaps the fact that homemaking courses are considered by many in educational circles as vocational courses explains in part why more of the schools studied do not have programs for rapid-learners in this area.

### *Industrial Arts*

Only 14 percent of the schools in the study indicated programs in industrial arts for the rapid-learner.

Students with original, inventive, creative ideas, interests, and talents are encouraged to carry out their ideas. Teacher emphasis upon this matter does not vary with school size or type. Much emphasis is placed upon those student projects which develop problem solving skills and critical thinking. Students are expected to acquire an expert degree of craftsmanship through course requirements.

Students are encouraged and assisted in developing hobbies related to interests through home workshops and other leisure time activities. The most striking thing is that teachers require a high degree of accuracy and precision in project construction, yet the same teachers do not rank the development of simple handtool-using skills higher than accuracy or precision.

At this grade level, very little emphasis is placed upon future employment, but developing consumer knowledge and skills through cost analysis, design, construction, and operation of common household appliances receives considerable stress by teachers of rapid-learners.

One might note that item number 29 (Table IX) was never used by the teachers of industrial arts to the rapid-learner. Is it possible that a general understanding of union activities at this age level might aid the student in

determining the values and detriments of belonging to a labor union when the student is faced with employment?

Although industrial arts is considered a vocational subject by many, certain basic skills can be acquired by the student which will better equip him for

TABLE IX

*Instructional Provisions and Procedures in Industrial Arts*

Item and rank	Techniques, provisions, and procedures	Mean
1.	Encourage students with original, inventive, and creative ideas, interests, and talents to carry out their ideas .....	2.00
2.	Place emphasis upon student projects which develop problem solving skills and develop critical thinking .....	2.00
3.	Encourage cooperative pupil-teacher planning of projects and activities .....	2.00
4.	Require high degrees of precision and accuracy in projects which pupils construct .....	2.00
5.	Require expert degree of craftsmanship of students .....	1.83
6.	Encourage and assist students to develop industrial arts hobby interests through home work shops and other leisure time activities....	1.83
7.	Place emphasis on the development of simple handtool-using skills....	1.67
8.	Conduct demonstrations of processes and operations students use in constructing projects .....	1.67
9.	Urge students to make extensive use of the school and/or the industrial arts shop library .....	1.50
10.	Provide opportunities for intensive repetitive tool-using exercises.....	1.33
11.	Develop consumer literacy through units on the selection and use of industrial products .....	1.33
12.	Give students opportunities for experiences in managing the industrial arts shop, supplies, records, safety, etc. ....	1.33
13.	Encourage pupils to undertake simple projects which can be completed in short amounts of time .....	1.33
14.	Provide facilities and encourage students to test the physical properties of commonly used industrial materials, such as metals, plastics, wood, textiles, leather, paper, etc. ....	1.33
15.	Require students to follow teacher directions and teacher-made plans..	1.33
16.	Encourage students to work on group projects involving the application of production methods and techniques .....	1.32
17.	Provide additional time in the industrial arts shop for students.....	1.17
18.	Inform students about and urge participation in craftsmen's fairs, exhibitions, and industrial arts awards programs .....	1.17
19.	Develop consumer skills and knowledge by having students compare the design, construction, materials used, operation, and costs of common household appliances .....	1.17
20.	Encourage students to read, observe, and evaluate various types of shop management plans involving personnel, equipment, and supplies .....	1.17
21.	Develop home mechanics skills essential in the maintenance of the home and its mechanical appliances .....	1.00
22.	Teach students to interpret statistical and graphic data about industry..	1.00

23. Urge students to read about, discuss, and observe the effects of technological development and industrialization in a community, state, or region .....	1.00
24. Have students read about, discuss, and observe modern industrial processes and techniques which cannot be carried on in the school.....	.83
25. Have students read books (about inventors, scientists, industrialists, and industrial problems) .....	.83
26. Assist students in arranging interviews with industrialists, employers, labor and business leaders in the community about industrial problems and trends .....	.50
27. Provide opportunities for students to apply, test, and experiment with science principles in electronics, metallurgy, mechanics, kinematics .....	.50
28. Arrange for students to have first-hand observations of industry and industrial processes carried on in the community .....	.33
29. Encourage students to investigate and become familiar with labor union policies and activities .....	.00

further education if he is a rapid-learner. Several of the instructors appended additional information to their questionnaires as special provisions for the rapid-learner:

We encourage the advanced student to involve himself in more complex and advanced shop projects.

Our students who are classified as rapid-learners are at their own discretion to choose projects.

We use woodworking as our special provision for the rapid-learner.

Although few instructors included special provisions for the rapid-learner in industrial arts, this course seems to offer an immense opportunity for educating the rapid-learner in product knowledge, consumer buying, and problems relating to various aspects of industry.



## **SUMMARY AND RECOMMENDATIONS**

Until recently, the rapid-learner has indeed been a forgotten child in the realm of modern junior high schools. Strangely enough, the unusual qualities which are possessed by this segment of the school population are the very reason for their being overlooked. Since the abilities of the rapid-learner are of such a nature that he poses no particular problem in the classroom, he is usually overlooked by the school administrator and classroom teacher.

If school communities would include in their overall educational objectives for their schools two basic underlying concepts and then see that these concepts were in operation, the rapid-learner would no longer be the neglected individual in our nation's schools. The following provisions should be found in all of our nation's schools if the rapid-learner is to meet the challenge that is his due in a highly developed technical society:

1. Provide a well-developed plan for locating the rapid-learner who needs special learning situations, and
2. Provide an organized program of learning experiences which present a REAL challenge to the special abilities of these pupils in that school.

It is highly important that the pupil's entire school cumulative record be consulted in regard to student selection. Such items as pupil intelligence, teacher evaluation, pupil's marks, reading ability, physical traits, mental and physical health, character and personality traits, social adjustment, and other criteria should be sufficiently studied and evaluated prior to selecting the students for any special program.

Once the student has been selected, provisions must be made for the student in the classroom. The oldest plan for modifying the school program in meeting the needs of the gifted or rapid-learner was to accelerate his progress through school. Several plans have been used by various schools in attempting to care for their rapid-learners. The first plan is the simplest and offers the least administrative difficulty. In substance, the student who is selected to enter the program is allowed to take more than the normal class load at one time; consequently, he is able to complete the total curriculum more rapidly than the less able student. The second plan which has been used to accelerate the rapid-learner is to allow the student to take the usual courses but completion is expected in shorter time. This plan, which offers certain administrative problems, also assumes that all students should be required to complete the same curriculum as the average student. The third plan, which was and is still in operation, involves the organization of a special curriculum for the rapid-



learner. When this plan is used, special curriculum provisions are made which allow special adaptations of subject matter content along with special teaching methods. The entire purpose of this latter plan is to allow the student to accelerate his program through school. The larger city school systems are primarily responsible for the special curriculum provisions in acceleration, usually providing a special staff trained for this work. The entire objective of acceleration is usually thought of as a program whereby students are allowed to complete the same curriculum as average students in a shorter length of time.

Enrichment for the rapid-learner has resulted as an objection to the programs of acceleration which seemed to be the vogue. Enrichment is concerned with the development of learning experiences through the adaptation of the usual content, materials, and methods of instruction to enrich the learning experiences with no reduction in time to complete the entire educational program. Enrichment is concerned with the nature of the learning experience, rather than the length of time required for completion, and is held of greatest importance to the education growth of the child.

The more common ways of enriching the curriculum for rapid-learners are usually classified as:

1. Enrichment provided in a special curriculum taught to gifted children in segregated groups.
2. Enrichment through special adaptations of the instructional program in regular classes.
3. Enrichment through special activities and responsibility in the home room, administrative duties in the school, and in extra-class activities.

Instructional methods and techniques which have been notably indicated as effective in the work with rapid-learners in this study may be briefly summarized as:

1. Pupil participation in planning learning activities.
2. Pupil leadership in carrying on learning activities.
3. Creative work is encouraged of all students.
4. Freedom exists within the realms set up by teachers to allow pupils to select individual projects.
5. A variety of instructional materials are made available to the teacher and student.
6. Problems and projects which demand abstract and critical thinking are encouraged.
7. Most groups enjoy individual and group oral activities as learning experiences.
8. A minimum of repetitive drill work is found among classes of the rapid-learner.
9. Teachers and students in this program usually enjoy a freedom from unnecessary administrative restrictions.

10. In classes for the rapid-learner, pupil leadership and responsibility in organizing the class and in discharging classroom routine is found.

A classroom situation which utilizes the aforementioned characteristics under the supervision of an intelligent, resourceful, and stimulating teacher should prove challenging to the superior learning abilities and the peculiar interests and needs of the rapid-learner.

In areas where large schools exist, and/or where alert administrators are in charge, the chance of schools overlooking the rapid-learner is small. This is not the case in small and medium sized school systems. In these schools definite plans for locating and providing for the rapid-learner must be encouraged. It cannot be overemphasized that the utmost care should be taken in planning for rapid-learners in *any* sized school. School officials, teachers, and parents must realize that in planning and carrying out recommended programs, the need of each child is primarily important. As programs are instituted, a careful and systematic evaluation of pupil progress is a *must* if the program is to be meaningful and continuous.

It is believed that all schools should take a second look at their educational objectives and determine whether the needs of *all* students are being met. The present study provides a list of techniques against which any school can check to ascertain whether enough is being done at the junior high school level in providing for its rapid-learners.

Only by challenging, stimulating, and inspiring its rapid-learners, as well as its slow and average learners, can each school hope to meet the needs of today's complex society.

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